Cyclones and gales.—There were about as many reports of gales as are usually noted in May, but no well-developed storm center is indicated in the parts of the North Atlantic which are covered by vessel reports.

The strongest gales, including two instances of force 11, were encountered about 400 to 700 miles to westward of Ireland during the period 11th to 15th. At this time pressure was very low over the greater part of the Greenland-Iceland area, while it was moderately high over the Azores and thence westward toward Bermuda.

Not so intense, but quite notable for the region of occurrence, were the gales met in the waters adjacent to Florida and the northern Bahamas from the 19th to 23d. During this period lower pressure than normal was indicated over Cuba and the southern Bahamas, while a strong High passed southeastward over the Lake region.

Somewhat earlier, on the 14th, an intensified trade of fresh gale strength was experienced but a short distance

north of the Panama Canal.

Fog.—There was no fog reported in any part of the Gulf of Mexico nor anywhere in the ocean to southward of the thirty-fifth parallel; but in most other areas where fog

occurs to an appreciable extent there was a notable increase in May over the frequency during the preceding month, and very often there was much more than normally is noted during May. In the 5° square 40° to 45° N., 45° to 50° W., there were no less than 24 days with fog; and to northward and westward of this square, fog occurred very frequently.

From the vicinity of Nova Scotia to Chesapeake Bay there was much fog during the first half of the month, but almost none afterward. During the period from 2d to 4th the fog led to several accidents in the coastal waters from Cape Cod to Delaware Bay, groundings being most frequent. The American steamship Angelina, inbound to New York, struck an anchored fishing boat, one man being killed and four missing. In Nantucket Sound the British steamship Canadian Planter sank as the result of a collision, but there was no loss of life and the vessel was presently refloated.

Near the British Isles, and to westward and southwestward as far as the twenty-fifth meridian, fog was noted to a moderate extent, but almost wholly during the 8-day

period from the 4th to 11th, inclusive.

## OCEAN GALES AND STORMS, MAY 1936

Vessel	Voyage		Position at time of lowest barometer		Gale	Time of	Gale ended	Low- est	Direc- tion of wind	Direction and force of wind at	Direc- tion of wind	Direction and high-	Shifts of wind
	From-	То	Latitude	Longitude	began May	barometer May	May	ba- rom- eter	when gale began	time of lowest ba- rometer	when gale ended	est force of wind	near time of low- est barometer
NORTH ATLANTIC OCEAN			. ,	. ,				Inches					
Jean Jadot, Belg. S. S Maine, Dan. S. S Quaker City, Am. S. S Boston City, Br. S. S Irene, Du. S. S Maine, Dan. S. S Exermont, Am. S. S American Shipper, Am. S. S.	Antwerp	New Yorkdo. Boston Montreal Amsterdam New Yorkdo.	47 40 N. 57 30 N. 51 18 N. 46 37 N. 45 53 N. 51 40 N. 35 34 N. 52 37 N.	37 41 W. 22 00 W. 20 59 W. 52 49 W. 16 05 W. 45 30 W. 57 40 W. 22 15 W.	1 3 4 5 5 8 10	10a, 1 10a, 2 Noon, 4 4p, 5 6a, 6 4p, 8 8a, 10 7a, 11	1 5 7 5 6 9 10	30. 04 29, 20 29, 60 29, 71 29, 70 29, 50 30, 02 29, 52	W8W SW SW NNW SSE SW	WSW, 7 SW, 7 WNW, 8 SW, 7 NNW, 8 W, 8 SSE, 8 WSW, 7	WNW. WNW. NE WNW. SSE WNW.	WSW, 8. WNW, 8. NW, 10. SW, 8. NNW, 9. WSW, 9. SSE, 8. WNW, 9.	WSW-WNW. W-NW. SW-W. None. WSW-NNW. SSE-8. 8-W.
Georgia, Dan. S. S American Shipper, Am.	Oslo Belfast	Portland, Maine. New York	55 20 N. 49 58 N.	24 38 W. 30 34 W.	11 12	9a, 11 Noon, 12_	12 12	29. 17 29. 64	88E	N, 11 SSW, 8	w	NW, 11 88W, 8	sse-ssw-nw. ssw-nw.
S. B. Volendam, Du. S. S. Pierre L. D., Fr. M. S. Santa Maria, Am. S. S. San Alvaro, Br. M. S. Europa, Ger. S. S. Duquesne, Am. S. S. Macabi, Pan. S. S.	Rotterdam Nordenham Cristobal Ardrossan Cherbourg New Orleans Preston, Cuba	do Montreal New York Tampico New York Havre Boston	48 53 N. 50 42 N. 10 06 N. 51 43 N. 49 16 N. 49 10 N. 25 26 N.	29 10 W. 26 08 W. 79 24 W. 19 57 W. 15 50 W. 12 25 W. 74 00 W.	13 13 14 12 14 17 20	Mdt., 18. 6a, 14 7a, 14 Noon, 14. 4p, 14 4p, 19 7p, 20	14 15 15 17 15 19 20	29. 53 29. 09 29. 62 29. 17 29. 58 30. 12 29. 83	W SSW NE SW SSW N	W, 8 NW, 10 NE, 4 SW, 9 SW, 6 NE, 6 NNE, 9	NNW SW NE NW NE NE	W, 8 NW, 11 NE, 8 W, 10 W, 8 NNE, 8 NNE, 9	S-W-NW. None. SW-WNW. SSW-NW. None. ENE-NNE- ESE.
General Gassouin, Fr. M.S. Bilderdyk, Du. S. S Steel Trader, Am. S. S. El Isleo, Am. S. S. Baccarappa, Am. S. S. Boston City, Br. S. S. Baccarappa, Am. S. S. Exochorda, Am. S. S. Paris, Fr. S. S.	Baytown, Tex  Norfolk Cristobal Galveston Savannah Montreal Savannah New York Havre	New York  Corpus Christl Boston Baltimore Liverpool Cardiff Liverpool Glbraltar New York	26 20 N. 27 49 N. 23 06 N. 224 42 N. 39 50 N. 251 44 N. 43 27 N. 39 49 N. 42 50 N.	79 50 W. 80 10 W. 74 24 W. 81 27 W. 55 49 W. 53 08 W. 41 38 W. 59 58 W. 47 30 W.	21 22 23 22 27 27 27 28 31	8p, 21 7a, 22 1p, 22 3p, 24 2a, 27 7p, 27 6a, 28 8p, 31	22 24 23 25 28 28 28 28	29. 85 29. 90 29. 88 29. 86 29. 72 29. 74 29. 91 29. 32 29. 84	NNE ENE ENE E W ESE S	NNE ENE, 7 SW, 1 ENE, 6 NNE, 5 8, 7 8, 6 8, 8	ENE ENE ENE E NNW SSE S S	ENE, 8 ENE, 9 ENE, 9 E, 8 SE, 8 S, 8 S, 8	NNE-ENE. None. NE-E. N-NNW.
NORTH PACIFIC OCEAN			,						•				
W. S. Rheem, Am. S. S. Saparoea, Du. M. S	Yokohama Singapore Los Angeles	San Franciscodo Yokohama	42 25 N. 45 54 N. 40 40 N.	168 55 E. 162 57 W. 132 20 W.	2 3 2	11p, 1 8p, 2 4a, 2	3 5	29. 25 29. 27 29. 69	W	SSW, 4 WSW, 6 SW, 5	W W. WSW	W, 9 W, 9 W, 9	None. SW-W.
M. S. Hiye Maru, Jap. M. B. Socony-Vacuum, Am.	Seattle San Francisco	do	51 59 N. 47 00 N.	147 58 W. 151 30 W.	4 3	2p, 5 6a, 5	6 7	129. 13 29. 56	sw	88W,8 8,8	sw wsw	WSW, 9 8, 9	ssw-wsw. s-sw.
S. S. Athelchief, Br. M. S. San Pedro Maru, Jap.	Yokohama	San Francisco	34 53 N. 41 35 N.	146 01 E. 154 08 E.	7 7	7a, 7 8p, 7	7 9	29. 49 29. 11	8 S	SW, 9 8, 6	N₩ W	SW, 9 SW, 8	8-NW. 8-SW.
M. S. Hiye Maru, Jap. M. S Socony-Vacuum, Am.	Seattle	Yokohamadodo.	50 41 N. 47 57 N.	176 51 W. 178 05 W.	8 9	Noon, 8 Noon, 11.	11 11	<sup>1</sup> 29. 61 30. 08	SE	sw,7 w,	WNW.	W, 10 W, 8	Steady.
S. S. Heiyo Maru, Jap. M. S. Potter, Am. M. S. Pres. McKinley, Am.	Los Angeles Hinigaran Victoria, B. C	Los Angeles Yokohama	46 42 N. 40 17 N. 48 32 N.	173 15 W. 142 45 W. 168 53 E.	12 12 17	5p, 12 4a, 13 2p, 17	12 13 18	29. 45 29. 65 28. 88	WSW NW E	W8W,7 NW,8 NNE,8	NW NW NNW.	WSW, 8. WNW, 9. N, 10	8W-NW. NW-WNW. NE-N.
S. S. Falsterbo, Swed. M. S. Silverguava, Br. M. S. Do. Falsterbo, Swed. M. S.	Kobesingaporedo Kobe	San Franciscododo Port Alberni	33 55 N. 19 47 N. 34 06 N. 41 07 N. 38 19 N.	137 20 E. 121 28 E. 145 54 E. 159 45 E. 144 23 E.	19 20 25 25 24	1p, 19 4a, 20 10p, 24 Noon, 25. 9a, 28	19 20 25 27 28	1 29. 61 29. 68 29. 62 1 29. 72 28. 78	ESE E NE ENE NE	ESE, 5 SE, 5 N, 5 E, 7 NW, 5	E NE NE NW	ESE, 11 NE, 8 NNE. 8 NE, 9 NW, 10	Steady.
Empress of Asia, Br. S. S. Pres. Jackson, Am. S. S.	Yokohama	Victoriado	35 18 N.		31	98, 28 11 p, 31	* 2	29. 24	E	NE, 9	NW	N, 10	NE-N.

<sup>1</sup> Barometer uncorrected.

Position approximate.